World Health Organization
European Region

Technical brief on strengthening the nursing and midwifery workforce to improve health outcomes

Government Chief Nursing and Midwifery Officers (GCNMOs) in the WHO European Region

ABSTRACT

Recognizing the critical contribution of the nursing and midwifery professions to health systems, population health and efforts to achieve the Sustainable Development Goals and universal health coverage, and in response to World Health Assembly resolution WHA 74.15, this technical brief aims to: support governments to strengthen government chief nursing and midwifery officers (GCNMOs) in their countries; identify the current roles and responsibilities of GCNMOs and senior nursing and midwifery leaders in the WHO European Region; and explore the enablers to support GCNMOs and/or senior nursing and midwifery leaders to work more effectively to support improved health outcomes. The ultimate goal is to increase the impact of GCNMOs and senior nursing and midwifery leaders on health, social care and health workforce policy to improve health outcomes.

KEWYORDS

NURSING

MIDWIFERY

LEADERSHIP

HEALTH WORKFORCE

COVID-19

Document number: WHO/EURO:2022-5975-45740-65795

Suggested citation. Technical brief on strengthening the nursing and midwifery workforce to improve health outcomes: Government Chief Nursing and Midwifery Officers (GCNMOs) in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2022. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Designed by jakob h.

World Health Organization
European Region

Technical brief on strengthening the nursing and midwifery workforce to improve health outcomes

Government Chief Nursing and Midwifery Officers (GCNMOs) in the WHO European Region

Contents

Acknowledgements

The WHO Regional Office for Europe would like to thank all the nationally nominated members of the Government Chief Nursing and Midwifery Officer Hub who took time to participate in interviews and follow-ups, filled in questionnaires and contributed to the content of this technical brief.

Overall technical conceptualization and leadership was provided by: Margrieta Langins, WHO Regional Office for Europe. Research design, analysis and writing of the document was provided by Alba Llop-Gironés, WHO Regional Office for Europe. Strategic and technical guidance in the development of the publication was provided by Natasha Azzopardi-Muscat, Division of Country Health Policies and Systems, WHO Regional Office for Europe; Tomas Zapata, Health Workforce and Service Delivery, WHO Regional Office for Europe; and Yanina Andersen, WHO Regional Office for Europe.

This technical brief has received contributions on content, structure and format from the following nursing and midwifery experts: James Buchan, University of Edinburgh, United Kingdom; Amanda Fehn, WHO headquarters; Elizabeth Iro, WHO headquarters; Diana J. Mason, Center for Health Policy and Media Engagement, George WashingtonUniversity School of Nursing, United States of America; Carey McCarthy, Health Workforce Department, WHO headquarters; Emily Tamelayne Mcwhirter, WHO headquarters; Jane Salvage, Kingston University and St George's, University of London, United Kingdom; and Jean White, WHO Regional Office for Europe.

World Health Assembly resolution WHA 74.15 calls on Member States to establish and strengthen national and subnational senior leadership roles for nurses and midwives with authority and responsibility for management of nursing and midwifery workforces and input into health decision-making, including as regulators of nursing and midwifery education and practice. The resolution also calls on Member States to consider appointing government chief nursing and midwifery officers (GCNMOs), as per the recommendations in the Global strategic directions for nursing and midwifery 2021–2025 and aligned, where appropriate, with WHO guidance on GCNMOs' roles and responsibilities.

Background

The WHO Regional Office for Europe government chief nursing and midwifery officers (GCNMO) Hub was established in September 2021 after the appointment of the Nursing and Midwifery Policy Adviser in the WHO European Region.

The GCNMO Hub is a Europe-wide network. It brings together GCNMOs and senior nursing and midwifery leaders who have been nominated by their ministries of health to participate in bimonthly discussions and workshops that focus on their role in enabling population health improvements through effective nursing and midwifery policy leadership. At the time of publication, the Hub had participants nominated from 38 countries of the WHO European Region, although the number was 35 when the interviews and the survey used to develop this technical brief were conducted.

The objectives of the hub are to:

1. serve as **a platform for exchange that can support GCNMOs in the WHO European Region** through the sharing of experiences, strategies and solutions with each other and with nursing and midwifery experts and scientists from across the Region and around the world;

2. **monitor, identify and support key emergent needs** in the Region to strengthen GCNMOs as integrated members of ministries of health;

3. **maximize learning from the COVID-19 pandemic** and increase the capacity of GCNMOs in the WHO European Region to support their governments in building back better; and

4. **equip GCNMOs** in the WHO European Region with key WHO resources and updates on the latest health policy strategies and approaches.

A definition of terms used in this technical brief is shown in Box 1.

Box 1 : Definitions of terms

The term **government chief nursing and midwifery officer (GCNMO)** is used in the technical brief to denote the most senior nursing and midwifery position in government. It may include chief nursing officers, senior nurse advisors and chief specialists.

Senior nursing and midwifery leaders have been nominated by ministries of health and include nursing and midwifery advisors, professors, representatives of nursing and midwifery associations and unions, and nurses and midwives with mid-management clinical roles.

What is the purpose of this technical brief?

Recognizing the critical contribution of the nursing and midwifery professions to health systems, population health and efforts to achieve the Sustainable Development Goals (SDGs) and universal health coverage (UHC), and in response to the World Health Assembly resolution WHA 74.15, this technical brief aims to:

1. support governments to make progress towards **appointing or strengthening** GCNMOs in their countries;
2. identify the **current roles and responsibilities** of GCNMOs and senior nursing and midwifery leaders in the WHO European Region; and
3. explore the **enablers to support GCNMOs and/or senior nursing and midwifery leaders** to work more effectively to support improved health outcomes.

The ultimate goal is to increase the impact of GCNMOs and senior nursing and midwifery leaders on health, social care and health workforce policy to improve health outcomes.

After reading this technical brief, policy-makers, including GCNMOs and/or senior nursing and midwifery leaders, will be able to:

- **review the functions of current GCNMOs and optimize their role** by identifying enablers of the competencies of GCNMOs and senior nursing and midwifery leaders and harnessing political and public support;
- **support governments to recognize the significant contributions of nurses and midwives during the COVID-19 pandemic**, during which GCNMOs and senior leaders in certain areas delivered express reforms to rapidly upskill and expand nurses' and midwives' competencies;
- **identify the factors that help GCNMOs to work effectively;** and
- **understand the need to support the development of career structures and pathways** in nursing and midwifery through opportunities for mentorship support and to ensure equal opportunities for women and men to access leadership opportunities in nursing and midwifery.

Box 2 : How was this technical brief developed?

This technical brief is part of a series exploring the four strategic areas for implementing the Global Strategic Directions for Nursing and Midwifery 2021-2025, and the accompanying Resolution WHA 74.15: Service delivery, Education, Jobs, and Leadership. This technical brief explores Leadership.

The Nursing and Midwifery Policy Adviser and a team of researchers interviewed the participants of the WHO European GCNMO Hub to gain a deeper understanding of their perceptions and experience of the roles and responsibilities of GCNMOs and senior nursing and midwifery leaders in influencing policy (1). A survey was also issued in two languages (English and Russian). This technical brief reflects findings from 35 Member States.

Situation in the WHO European Region

Nurses and midwives account for 61.8% of practising health professionals in the WHO European Region. Eighty-nine per cent of nurses and 98% of midwives are women *(2)*. They are major contributors to population health and health systems *(3,4)*. Nurses and midwives play a key role in the provision of primary care, hospital-based services and in the coordination and delivery of health care *(5,6)*, with 90% of all worker–patient interactions in health care being met by nurses *(7)*.

Despite representing a majority of the health and care workforce, nurses and midwives, and also women overall, are not being engaged adequately in policy-making at all levels *(8)*. Nurses and midwives are underrepresented in ministries of health *(9,10)*. The absence of input into policies from GCNMOs and senior nursing and midwifery leaders and the absence of women in policy-making processes weakens progress towards achievement of the SDGs and UHC *(11)*.

"The absence of input into policies from GCNMOs and senior nursing and midwifery leaders and the absence of women in policy-making processes weakens progress towards achievement of the SDGs and UHC."

A core priority of the WHO European Programme of Work 2020–2025: United Action for Better Health in Europe *(10)* is to support Member State efforts towards achieving UHC and post-COVID-19 recovery through the formulation of national strategies for improving working conditions and retaining and motivating the existing workforce *(11)*. This is consistent with the position of the Monti Commission *(12)*, convened by the WHO Regional Office for Europe to rethink policy priorities in the light of pandemics. The Monti Commission has called for concerted investment in the workforce to reduce inequalities and increase the resilience of health systems *(12)*.

Creating leadership opportunities is a strong factor in strengthening nursing and midwifery and is associated with better implementation and oversight of the nursing and midwifery workforce to ensure its alignment with key priority areas *(13,14)*. The Roadmap to Guide Implementation of the Global Strategic Directions for Nursing and Midwifery in the WHO European Region *(11)* argues that the involvement of nursing and midwifery at all levels of policy development and implementation also ensures acceptability, feasibility and full ownership of the processes of implementing and sustaining effective policies. During the COVID-19 pandemic, for example, the need to involve health workers in medium-to-long-term needs assessments and planning to create a better foundation for sustainable resource deployment to address possible subsequent waves of the pandemic was recognized *(15)*.

"Creating leadership opportunities is a strong factor in strengthening nursing and midwifery and is associated with better implementation and oversight of the nursing and midwifery workforce to ensure its alignment with key priority areas."

Who are the GCNMOs and senior nursing and midwifery leaders in the WHO European Region?

A demographic description, including profession by background, is provided in Table 1.

While nurses (less so midwives) have held senior positions in government through the creation of nursing divisions for decades *(16)*, nurses and midwives in senior leadership positions carry a variety of designations with considerable differences in responsibilities, human and financial resources and reporting relationships *(17)*.

Currently, only 18% of Member States of the WHO European Region have nursing divisions in their ministries of health.

The relationship distribution of nominated senior nursing and midwifery leaders in ministries of health throughout the region (Fig. 1) is summarized as follows:

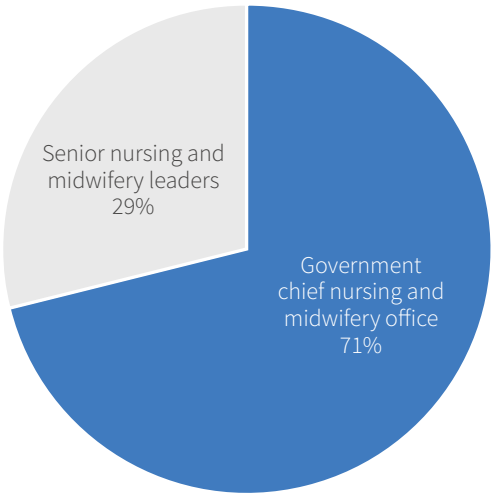
- 71% of Member States have GCNMOs that correspond with the title definition given in Box 1; and
- 29% have senior nursing and midwifery leaders or focal points as defined in Box 1.[1]

Twenty-three per cent of Member States have a chief nurse carrying responsibility for midwifery, while only 6% of countries have a chief midwifery officer. Table 2 shows the type of posts at ministry of health level or equivalent.

Table 1. GCNMO and senior nursing and midwifery policy leader characteristics, 2022

Demographic	Characteristics	Percentage
Sex	Female	63
	Male	11
Age	18–24	0
	25–34	3
	35–44	14
	45–54	37
	55–64	20
	65+	0
Profession by background	Physician	8
	Nurse	86
	Midwives	6

Fig 1. Main positions defined by the relationship with ministries of health, 2022



1 Nurses hold most of these positions. Few of them are midwives, and in some countries, the position is held by a medical doctor.

Table 2. Type of positions at ministry of health level or equivalent of GCNMOs and senior nursing and midwifery leaders nominated to the WHO Regional Office for Europe GCNMO Hub, 2022

Country	Nursing Division	Midwifery Division	Chief Midwife	Chief Nurse	Chief Nurse and responsible for Midwifery	Chief Specialist/ Adviser of Ministry	Focal–Point for the Ministry
Armenia	–	–	–	–	–	–	x
Austria	–	–	–	x	–	–	–
Belarus	–	–	–	–	–	x	–
Belgium	–	–	–	–	–	x	–
Croatia	–	–	–	–	–	–	x
Cyprus	x	–	–	–	x	–	–
Denmark	–	–	–	–	–	x	–
Estonia	–	–	–	–	–	–	x
Finland	–	–	–	x	–	–	–
Georgia	–	–	–	–	–	–	x
Iceland	–	–	–	–	–	x	–
Ireland	x	–	–	–	x	–	–
Israel	x	–	–	–	x	–	–
Italy	–	–	x	x	–	–	–
Kazakhstan	–	–	–	–	–	x	–
Kyrgyzstan	–	–	–	–	–	x	–
Latvia	–	–	–	–	–	–	x
Lithuania	–	–	–	–	–	x	–
Luxembourg	x	–	–	–	x		–
Malta	–	–	–	–	–	x	–
Netherlands	–	–	–	x	–	–	–
Norway	–	–	–	–	–	–	x
Poland	–	–	–	–	–	–	x
Portugal	–	–	–	x	–	–	–
Republic of Moldova	–	–	–	–	–	x	–
Romania	–	–	–	–	x	–	–
Russian Federation	–	–	–	–	–	x	–
Slovakia	x	–	–	–	x	–	–
Slovenia	–	–	–	–	–	–	x
Sweden	–	–	–	–	x	–	–
Switzerland	–	–	–	–	–	–	x
Tajikistan	–	–	–	–	–	–	x
Türkiye	–	–	–	–	–	–	x
Ukraine	–	–	–	–	–	x	–
United Kingdom of Great Britain and Northern Ireland*	x	–	x	x	x	–	–

* There are varied responses from the different countries of the United Kingdom of Great Britain and Northern Ireland.

Models of senior nursing and midwifery leadership in the WHO European Region

Titles vary among senior nursing and midwifery leaders in the Region. Efforts to engage with these leaders to improve health and health workforce outcomes will be strengthened by an understanding of the kinds of influence, responsibility, accountability and resources nursing and midwifery senior leaders have at their disposal. This can not only help to introduce these roles where they currently do not exist, but also enable opportunities to improve the roles to be identified.

Over the course of the mapping exercise conducted in 2021–2022, the 35 countries of the WHO European Region with a nominated senior nursing or midwifery leader were classified according to the ability of the nominated GCNMO or senior nursing and midwifery leader to influence policy (Table 3). The five models in the Region were identified as:

- Focal-point model
- Dispersal model
- Programme model
- Advisory model
- Executive model

Table 3. Dominant model of the countries based on the GCNMOs' ability to influence policy

Focal–point	Dispersal	Programme	Advisory	Executive
Armenia	Belarus	Lithuania	Austria	Cyprus
Croatia	Denmark	Sweden	Belgium	Finland
Estonia	Iceland		Italy	Ireland
Georgia	Kazakhstan		Netherlands	Israel
Latvia	Republic of Moldova[a]		Portugal	Kyrgyzstan
Norway	Russian Federation		Slovakia	Luxembourg
Poland			Slovenia	Malta
Switzerland[a]			Ukraine	Romania
Tajikistan			United Kingdom[b]	United Kingdom[b]
Türkiye				

[a]At the time of producing this document, the national role and responsibility of the GCNMO was being discussed and/or under development.
[b]Responses vary across the four regions of the United Kingdom.

CASE STUDY

FOCAL–POINT MODEL: LATVIA

Description of the Focal Point for Nursing and Midwifery

The position of Focal Point for Nursing and Midwifery is held by a member of the board of the Latvian Nursing Association (LNA) who is also an assistant professor at a national university. The main responsibilities of the role are to represent Latvia in international nursing and midwifery meetings, develop collaborative networks with other countries and promote nursing leadership and the nursing role at conferences and meetings. The Focal Point reports 2–4 times per year to the Minister of Health and meets with the Ministry's Department of Human Resources Development to discuss the outcomes of meetings attended, LNA requests, nursing education reform and collaboration with other professional associations, and to provide input and support to responses to emerging challenges.

Impact

As part of general reform of the Latvian health-care system in 2017, a working group on evaluating nursing and midwifery specialties was formed. The group was operational between 2 February and 16 November 2017.

Following this and other activities, the concept of nursing education was reformed. As of 2022 the country has introduced bachelor's-level education as the single route to qualifying as a general nurse. The move was supported by the Ministry of Health, but it was the LNA that led on initiating, developing and devising how to support the reform across the country.

Prior to 2022, the nursing profession had seven basic specialties (including intensive care, surgical, medical and mental heath nursing) and six additional specialties (such as diabetes, oncology and neonatology nursing). Those wishing to work in one of the specialties or subspecialties needed to study the topic at university for one year and be issued a certificate by the LNA. Thereafter, their working options were restricted to their area of specialty – they could work only in the area for which they had certificaton.

Following the 2022 reform, nurses graduating with the bachelor's degree will be equipped with competencies that can be applied in all areas of care, so will be qualified to work across the health-care system. These nurses will not only have greater competencies, but will also be able to move more freely through the labour market and change their work area as they wish. Competencies to specialize in specific areas (paediatrics, anaesthesia and intensive care, perioperative care, psychiatry and narcology) can be acquired through continuous professional development activity.

The presence of a Focal Point for Nursing and Midwifery embedded in the LNA who serves as the contact with the Government and who monitors nursing developments in other European countries has been instrumental in enabling the national nursing policy to be revisited. The Focal Point is now participating in various national task forces, regional nursing meetings and has been able to establish links with other professions and service developments.

The **focal-point model** illustrates a situation in which a country has a designated focal point who communicates with nursing and midwifery forums, WHO and the government. This is the case in 10 countries of the Region – Armenia, Croatia, Estonia, Georgia, Latvia, Norway, Poland, Switzerland, Tajikistan and Türkiye. Some of these countries are in the process of defining the roles and responsibilities of GCNMOs with a national focus.

CASE STUDY

DISPERSAL MODEL: DENMARK

Description of the position

The Danish Health Authority, which is the highest health professional authority in Denmark, provides recommendations, guidance and action plans to the Ministry of Health, municipalities and regions. Seven of the 60 employees working at the Danish Health Authority in health promotion, primary health care and hospital planning are nurses. Three of them have additional responsibilities in ensuring Danish representation at international and European meetings. They liaise with the Executive Board of the Danish Health Authority to determine which Authority staff should attend and which roles should be represented at particular meetings.

The Danish Health Authority focuses on supporting multiple disciplines to develop practical solutions that benefit all professions. Nurses feature strongly among the professions represented, as do occupational therapists, physiotherapists and medical doctors.

These professionals contribute to ensuring the Danish Health Authority's work fits into regional and municipal contexts. This promotes successful implementation in practice and ensures the acceptability, feasibility and full ownership of recommendations, guidance and action plans among the nursing workforce.

Impact

The dispersal model ensures a nursing perspective on service organization and health service availability, accessibility, quality and appropriateness, especially in relation to primary health care and health promotion, is incorporated into the Danish Health Authority's recommendations, instructions and action plans. Nurses' knowledge in areas such as patient experience, organization, collaboration and clinical processes are considered important elements for health-care system development.

The **dispersal model** is in place in some countries in which the ministry of health employs nursing and midwifery experts, each of whom performs separate functions, in different departments and divisions. Countries using the dispersal model have not assigned the lead for nursing and/or midwifery policy or management to a GCNMO, but have given the nursing and/or midwifery experts a role in contributing to other functions or programmes. People in these positions are rarely (if ever) in charge of their own department and remain at a distance from central decision-making. Six countries in the Region – Belarus, Denmark, Iceland, Kazakhstan, the Republic of Moldova and the Russian Federation – employ this model.

The **programme model**, is a model of influence through which a country assigns the chief nurse and/or midwife to manage a specific programme (on, for example, patient safety, health services or higher education). The role may include cross-sector linkages but the post-holder is not in charge of nursing and midwifery workforce regulation and monitoring, as is the case in Lithuania and Sweden.

CASE STUDY

PROGRAMME MODEL: SWEDEN

Description of the Chief Nurse Officer position

The position of chief nursing officer (CNO) was established by the Ministry of Health and Social Affairs in the early 2000s.

The Ministry of Health and Social Affairs has delegated responsibility for appointing a CNO to the National Board of Health and Welfare, a government agency. The CNO is appointed by the agency's Director-General and is an employee of the National Board of Health and Welfare, which reports to the Ministry of Health and Social Affairs. The duration of the appointment is two years with the possibility of extension.

The current CNO sits in the Department of Knowledge-based Management in Health Care at the National Board. She combines her responsibleness as CNO with playing an expert role in patient safety.

The overall task of the CNO is to be the Swedish contact point for the European Union and WHO on nurse-related issues. The CNO therefore represents Sweden in an international context.

Daily responsibilities include leading and coordinating work on patient safety at national level. The CNO leads the National Council for Patient Safety, which includes a number of authorities and national organizations. She has regular meetings with senior chief nurses, unions and professional associations and participates in professional networks on promoting safer care. Important parts of the CNO and patient-safety expert roles are collecting and analysing information, designing guidelines based on national legislation and representing the National Board of Health and Welfare.

Impact

The current CNO reorganized the work under her responsibility and is now leading the agenda on the patient safety programme, supported by nurses working in a range of positions in the National Board of Health and Welfare. She commissioned work on the new national action plan for increasing patient safety, which lays out mandatory regulations produced by the National Board to increase patient safety and the quality of care.

The CNO has also had an impact on the regulation of nurses and strengthening of leadership and education through establishing a national network for regional CNOs.

Countries using the **advisory model** have a nurse and/or midwife officer who is an expert advisor to senior policy-makers (often chief medical officers) and is engaged in national decision-making, but has no jurisdiction over the nursing and/or midwifery workforces. This is the case in eight countries of the Region – Austria, Belgium, Italy, the Netherlands, Portugal, Slovakia, Slovenia and Ukraine – and in some of the devolved administrations of the United Kingdom.

CASE STUDY

ADVISORY MODEL: BELGIUM

Description of the Nursing Adviser position

Competence is dispersed across levels of governance in Belgium, with the federal government responsible for legislation on health-care professionals and some sectors (including hospitals, health-care networks, quality of care, home-care financing and provision of urgent medical assistance) and communities for education and certain aspects of health, such as care of older people, prevention and outpatient medicine. It is therefore difficult to have a single person representing nurses across the levels of governance and competence.

The nursing adviser position is based at the Directorate-General for Health Care in the Federal Public Service of Health, Food-chain Safety and Environment.

The scope of the advisor's role focuses on nursing advisory bodies at federal level and involves coordinating the Federal Council for Nursing and the Technical Commission for Nursing.

The Council gives the Minister of Public Health advice on all matters relating to nursing, particularly on nursing practice and required qualifications. It may also advise authorities in communities on any matter relating to the education and training of nurses.

The Technical Commission for Nursing was established in 1975. It gives the Minister of Public Health advice on the list of technical nursing activities, activities that may be delegated by a doctor to a nurse, procedures for carrying out the activities and the qualification requirements nurses must meet.

Impact

Advice from the Council and Commission during the COVID-19 pandemic that had greatest impact related to:

- determining the personal protective equipment needed for nursing practice during a pandemic;
- constituting a strategic stock of nurses and organizing and taking responsibility for the first-line stock in ambulatory care; and
- providing advice for a law that allowed non-legally qualified persons to carry out nursing activities in the context of the COVID-19 pandemic by determining the activities that could be included and the conditions of implementation.

Other main advice provided by the advisory bodies included the function model for nursing of the future and defining the functions and competency profiles of advanced practice nurses, general care nurses, specialized nurses, clinical nurse researchers, clinical nurses and health-care assistants.

Successful actions beyond COVID-19 work that have been taken by the Ministry of Health after consideration of the advisory bodies' opinion are:

- defining nursing activities in ambulance rescue services;
- extending the list of authorized nursing activities to health-care assistants; and
- creating the conditions for granting a nursing assistant licence to student nurses.

CASE STUDY

EXECUTIVE MODEL: ISRAEL

Description of the GCNMO position

The Israeli Public Health Regulations (1981) designate the GCNMO in the Nursing Division as an appointee of the Director-General of the Health Ministry. The GCNMO is responsible for health policy related to the nursing and midwifery professions.

The Nursing Division has 11 departments dealing with: accreditation and licensing; accreditation and licensing of post-basic education; accreditation and licensing of advanced practice nursing education; licensure exams; professional development; professional guidelines; quality of care and competence of nurses; nursing workforce and Nursing Division budgets; management of the health workforce in emergencies; nursing innovation and research; and information and data infrastructure.

The independent budget of the Division allows the GCNMO to lead the nursing profession in all aspects of education, licensing, development and profession empowerment. The role also encompasses all stages of the policy cycle, including vision-setting, assessment of needs, planning, implementation and evaluation.

Impact

The 10 core challenges for the Israeli Nursing Division in the coming years are to: 1) increase the number of nurses; 2) enable nurses to work to their full potential and scope of practice; 3) support nurses' empowerment and professional development; 4) strengthen the clinical specialist nurse workforce; 5) lead digital transformation and implementation of advanced technologies; 6) manage the human capital of nursing in routine and emergency times; 7) lead the international activities of the WHO Collaborating Centre on Leadership and Governance in Nursing; 8) promote innovation and research in nursing policy; 9) lead the strategic health-policy programme "First years of life"; and 10) promote the Nurses Act.

The academic education of nurses in Israel falls under the auspices of the Ministry of Education. The Nursing Division and GCNMO's team have developed political and professional ties with the Council of Higher Education. This has facilitated the establishment of 26 nursing schools in universities and colleges, with 6000 new nursing students enrolled each year. The Nursing Division is also responsible for the regulation and approval of post-basic nursing education programmes. Currently, 47% of registered nurse graduates undertake post-basic education.

The nursing profession, especially the nurse practitioner profession, has progressed greatly in Israel in recent years. The Nursing Division has developed regulations, scopes of practice and education programmes for nurse practitioner roles since their establishment in November 2013. Today, there are more than 200 registered nurse practitioners employed across eight clinical fields: care of older people, palliative care, neonatal intensive care, rehabilitation, primary care, pain management, diabetes and surgical care. A programme for leadership, policy and nursing management for high-level positions in nursing has recently been developed.

Another example of the impact of the Division is its work in setting and upgrading professional standards and regulations in clinical and administrative fields. Currently, Israel has 50 advisory committees managed and led by the Nursing Division.

The Nursing Division/GCNMO directed the entire health workforce during the COVID-19 pandemic. Key outcomes include the training of 2000 nurses in intensive care, the graduation of 4000 new nurses between July 2020 and July 2021 and the recruitment of 7418 nursing students into working roles.

The Nursing Division adds significant value to the care of the population of Israel. It is a full partner in a multiprofessional team that plans responses to health-system challenges. It operates independently, realizing the full professional potential of nurses in a changing and challenging environment by developing them professionally and expanding their academic and clinical training.

In the **executive model**, the country has a nurse and/or midwife with line authority over nursing and/or midwifery who also shapes health policy by providing expert advice on nursing-related issues, developing the profession, managing budgets and assuring the quality of nursing staff. In some countries (but not all) it includes setting educational and practical standards. This is the case in nine countries of the Region – Cyprus, Finland, Ireland, Israel, Kyrgyzstan, Luxembourg, Malta and Romania – and some devolved administrations of the United Kingdom.

CASE STUDY

EXECUTIVE MODEL: KYRGYZSTAN

Description of the position of Chief Specialist on Nursing Care

The new positions of Deputy Director/Chief Physician for Nursing Care were introduced by a decision of the Collegium of the Ministry of Health of the Kyrgyz Republic in 2010. The aim was to strengthen nurses' and midwives' roles in management, leadership and policy-making. Nurses also occupy the leading position of Chief Specialist on Nursing Care at the Ministry of Health, the main health department of Bishkek City and educational organizations.

Impact

The Chief Specialist on Nursing Care had a leading role in identifying the need to bring systemic changes to nurses' scope of practice by expanding their functions at different levels. The creation of so-called universal nurses will unify nursing functions to deliver patient care according to physicians' recommendations. These nurses have been piloted in the context of COVID-19. This pilot optimized nurse: patient ratios and had an impact on the quality of care provided to patients in intensive care units. In addition, the Ministry of Health is planning to issue a new order to train nursing specialists, whose level of knowledge shall not be lower than that of a feldsher.

What roles do they play in health and care policies and workforce regulation?

GCNMOs and senior leaders are important not only to serving and advising governments on nursing and midwifery workforce policies, but also in shaping health and social policies. The distribution of the current responsibilities of GCNMOs and senior nursing and midwifery leaders in the WHO European Region is shown in Table 4.

More than half of the GCNMOs and senior nursing and midwifery leaders held responsibilities for:

- setting and evaluating shared and appropriate nursing and midwifery strategic direction, objectives and plans (52%);
- developing national nursing and midwifery capacity (52%);
- establishing liaison with the professions of nursing and midwifery and other health professional groups (71%);
- establishing partnerships and collaborating with the private and public sectors and academic institutions (62%); and
- representing and advocating for nursing and midwifery interests and contributions nationally and/or internationally (67%).

The countries with senior nursing and midwifery leaders under the focal-point model held the least number of responsibilities, and those with GCNMOs under the executive and programme models the most.

Table 4. Proportion of responsibilities under leadership and influence role assumed by GCNMOs and senior leaders according to the models of GCNMOs' ability to influence policy in the WHO European Region, 2022

Responsibilities	Overall (%)	Focal-point (%)	Dispersal (%)	Programme (%)	Advisory (%)	Executive (%)
Setting and evaluating shared and appropriate nursing and midwifery strategic direction, objectives and plans and ensuring appreciation of the resources required to facilitate implementation, with outcomes clearly focused on patient benefit	52	17	33	100	50	100
Introducing, influencing, managing and evaluating innovative change programmes to achieve strategic objectives	48	17	67	0	50	80
Identifying and developing national nursing and midwifery capacity and capability to deliver positive patient outcomes	52	17	67	0	50	100
Establishing liaison, collaboration and networking with the professions of nursing and midwifery and other health professionals and organizations	71	50	67	100	67	100
Establishing appropriate partnerships and facilitating collaboration with the private and public sectors and academic institutions	62	33	67	100	67	80
Representing and advocating for nursing and midwifery interests and contributions nationally and/or internationally	67	50	67	100	67	80
Advocating for involvement of patients, families and communities in health-care decisions	38	17	67	0	33	60
Advocating for consideration of the health of the population in public policies and services	43	17	67	0	33	80
Leading the establishment of governance structures for nursing and midwifery at national and institutional levels to provide overall leadership and direction	48	0	67	100	50	80
Engaging nursing and midwifery in setting shared annual strategic goals and programmes, including effective workforce planning	48	17	33	100	50	80

0–33% affirmative responses

34–66% affirmative responses

67–100% affirmative responses

Workforce policy advice

GCNMOs and senior leaders provide policy advice to governments and participate in setting the priorities in issues concerning nursing and midwifery workforce policies on education, regulation, scope definition, workplace safety and retention and recruitement. Table 5 shows the proportion of GCNMOs that assumes each responsibility under this policy advice role. The two responsibilities carried out by a greater proportion of GCNMOs are:

- providing advice and credible professional opinion on nursing and midwifery's contribution to meeting population health goals and the development of national health plans (61%); and
- providing advice on nursing and midwifery workforce capacity, capability and skill mix (61%).

GCNMOs under the programme and executive models held a greater number of responsibilities than those under the focal-point, advisory and dispersal models.

Table 5. Proportion of responsibilities under policy advice role assumed by GCNMOs and senior leaders according to the models of GCNMO's ability to influence policy in the WHO European Region, 2022

Responsibilities	Overall (%)	Focal- point (%)	Dispersal (%)	Programme (%)	Advisory (%)	Executive (%)
Providing advice and credible professional opinion on nursing and midwifery's contribution to meeting population health goals and the development of national health plans	61	20	100	100	40	100
Providing advice on nursing and midwifery workforce capacity, capability and skill mix	61	20	100	100	40	100
Providing strategic advice to the minister of health and the government on nursing and midwifery	56	0	100	100	40	100
Recommending policies and initiatives to support government health objectives relating to quality, safety and best practice	50	20	50	100	40	80
Recommending professional regulation and policy in relation to the nursing and midwifery professions and professional practice	56	20	50	100	60	80
Providing advice on educational programmes standards, accreditation and funding	56	20	50	100	40	80
Engaging communities, organizations and other sectors to identify key components of effective policy to promote health in the context of nursing and midwifery and the wider health arena	39	20	100	0	40	40
Identifying and collaborating with partners in addressing public health issues	50	20	100	0	40	80
Advising on the effectiveness of health policies in relation to nursing and midwifery, to include recommendations on further policy direction in this regard	50	20	50	100	40	80

0–33% affirmative responses
34–66% affirmative responses
67–100% affirmative responses

Planning and delivery of health services

In addition to workforce policies, some GCNMOs and senior leaders in Member States of the Region also have operational management roles in planning and delivery of health services (Table 6). Overall, more than half of the GCNMOs (56%) promote the implementation of appropriate laws regulating nursing and midwifery education, practice settings and practising professionals. GCNMOs under the executive model held the greatest range of responsibilities compared to the other models, and 80% of GCNMOs under the executive model had responsibilities in coordinating emergency preparedness and crisis response.

Table 6. Proportion of responsibilities under health systems' operational role assumed by GCNMOs and senior leaders according to the models of GCNMO's ability to influence policy in the WHO European Region, 2022

Responsibilities	Overall (%)	Focal- point (%)	Dispersal (%)	Programme (%)	Advisory (%)	Executive (%)
Establishing national nursing and midwifery standards for quality and patient safety	50	20	50	100	60	60
Promoting the implementation of appropriate laws regulating nursing and midwifery education, practice settings and practicing professionals	56	20	50	0	60	100
Enhancing nursing and midwifery productivity, capacity and capability through learning and development opportunities	50	20	50	0	60	80
Accessing and using information systems and technologies to plan Nursing and Midwifery according to health systems demand	44	0	50	0	60	80
Coordinating emergency preparedness and crisis response	33	20	0	0	20	80

0–33% affirmative responses

34–66% affirmative responses

67–100% affirmative responses

"In addition to leadership and policy advice, some GCNMOs and senior leaders have operational management roles in planning and delivery of health services."

Coordination of the emergency response during the COVID-19 pandemic

The COVID-19 pandemic has driven governments to take innovative actions to protect their populations by creating new task forces and expert boards and assigning new responsibilities. The COVID-19 pandemic has created renewed momentum for governments to recognize the nursing and midwifery professions as major contributors to health care and population health, including at policy level. The Nursing Division of the Ministry of Health of Israel, for example, was assigned to manage the entire medical workforce during the COVID-19 pandemic.

Despite noticeable involvement of some GCNMOs of the Region in national COVID-19 responses and growing public awareness of the nursing role in health care through media representation, other GCNMOs and senior leaders have faced challenges to participating and providing timely advice as, for example, representatives of official scientific advisory groups. A third group of GCNMOs and senior leaders has not been invited to contribute to these discussions *(18)*.

Additional areas in which GCNMOs have contributed during the COVID-19 pandemic are:

- drafting, reviewing and/or updating legislation on the nursing and midwifery professions and regulation of education institutions;
- developing clear strategic plans to address lack of personnel by reprofiling the workforce and rapidly upskilling and expanding competencies to support deployment of students and redeployment or recruitment of new and retired staff;

- planning and managing health services, including quality assurance, modification of service delivery models and patient safety initiatives (such as preventing nosocomial transmission);
- promoting staff safety and well-being;
- coordinating between levels, including between municipalities and various levels of government, and supporting intersectoral coordination through involvement in mass vaccination programmes;
- strengthening collaboration with professional associations, multiple providers, unions and education institutions; and
- using relevant data for decision-making.

"The COVID-19 pandemic has created renewed momentum for governments to recognize the nursing and midwifery professions as major contributors to health care and population health, including at policy level."

Programmes for health status improvement

In the context of WHO's priority programme areas, GCNMOs and senior leaders have wide responsibilities in advising on programmes for health status improvement. As described in Table 7, 61% of GCNMOs and senior nursing and midwifery leaders coordinate nursing and midwifery input into priority health programmes. GCNMOs under the executive and dispersal models held the greatest number of responsibilities in this area compared to those in the focal-point, advisory and programme models.

Table 7. Proportion of responsibilities under the role of advising on programmes for health status improvement assumed by GCNMOs and senior leaders according to the models of GCNMOs' ability to influence policy in the WHO European Region, 2022

Responsibilities	Overall (%)	Focal-point (%)	Dispersal (%)	Programme (%)	Advisory (%)	Executive (%)
Coordinating nursing and midwifery input into priority health programmes	61	20	100	0	60	100
Acting as liaison on nursing and midwifery between the ministry of health and WHO	78	60	100	100	60	100
Facilitating multidisciplinary teams to implement health interventions in the country	44	20	50	0	40	80
Contributing to the health status assessment of the country	50	20	100	100	20	80
Planning, implementing, coordinating and monitoring of health programmes	33	0	50	0	20	80

0–33% affirmative responses
34–66% affirmative responses
67–100% affirmative responses

Supporting intersectoral work

Several GCNMOs and senior leaders reported regular intersectoral work, including working with ministries of social affairs and education. Fewer reported working with ministries of labour/employment, social security and/or finances. Depending on the political context, GCNMOs are working on one or more of the following areas: knowledge gathering and building consensus; strategic and/or operational planning, design and implementation; legislation and professional regulation; and resource allocation and budgeting. The issues of focus are nursing and midwifery education, provision of long-term or community care, and specific areas of social inequity (such as housing) that have a direct impact on health.

"These GCNMOs have a key role in identifying critical issues, collecting the relevant data and laying the grounds for intersectoral dialogue."

Strengthening data planning, management and monitoring

Some GCNMO have responsibilities for national data planning, management and monitoring of the nursing and midwifery workforces to meet health service demands and population health needs. These GCNMOs have a key role in identifying critical issues, collecting the relevant data and laying the grounds for intersectoral dialogue. GCNMOs' access to data in some countries is nil, however, while other GCNMOs have access only to nursing and/or midwifery workforce databases. Some GCNMOs nevertheless have full access to data on human resources for health, service delivery and patient information.

What is required for GCNMOs to work effectively?

Regardless of a country's classification based on the models previously described, some organizational components are essential to enable GCNMOs to work effectively. These vary considerably in the WHO European Region according to GCNMOs' authority, access, support and recognition of the position within government and further afield *(17)*.

"Organizational components are essential to enable GCNMOs to work effectively."

Mandate to carry out a full range of functions

The mandate of GCNMOs varies across the region and many reported at least one responsibility that they could be doing but are not, and as a result, is being left unaddressed. This mapping of responsibilities now clearly shows at least three critical areas where GCNMOs could clearly have more definitions of functions: workforce planning, health agenda and service design and intersectoral collaboration.

Sufficient authority will include approval of GCNMOs at the different levels of a country's administrative structure, and will need to consider the governance structure and/or decentralization status of a given country. Generally, the GCNMO post is not a political position and post-holders are usually appointed by the civil service. Nurses and midwives are sometimes elected as members of parliament, but identification of which countries have nurses and midwives elected to such positions was beyond the scope of this work.

Access to informed decision-making and planning

GCNMOs' access to the minister and/or senior officials, ministry staff, leaders and organizations outside the ministry, nurses and midwives in the health system and health information systems varies across the Region.

Most of GCNMOs and senior leaders are employees of the ministry of health or government agencies. Some GCNMOs reported having access to the minister and/or senior officials, ministry staff, national and international professional associations, trade unions and/or universities and other education institutions. In some cases, however, connections to ministry staff, the minister and senior officials are missing. International connections can be determined by knowledge of a foreign language.

GCNMOs' perceived barriers to health information systems are related to: ownership of the information (other departments or external bodies such as national institutes of statistics); multiple sources of data; decentralization of the health system and subsets of information that belong to subregional levels; frequency of data collection; and funding.

Support and resources to excercise functions

GCNMOs need different types of support to work effectively, but this is not always provided. Three types of functions are key – having personnel, possessing adequate financing and being able to authorize expenditure of funds – but not all GCNMOs in the Region have such authority.

Some GCNMOs manage the staff who are accountable to them, including technical and other experts, administrative assistants and clerical staff. Forty-six per cent, however, do not have staff available. Twenty per cent are unpaid for their work and 49% cannot authorize expenditure from a given budget. Such gaps in capacity are filled with well established networks and/or coalitions with national professional associations, trade unions and/or universities and other education institutions, but if not clearly allocated can also result in tensions between different stakeholders.

Engaging GCNMOs' and senior leaders' contributions

Internal and external understanding within the ministry of health and among the general population have not been achieved in some countries. Factors associated with the recognition of GCNMOs' and senior leaders' contributions to shaping health and care policy of nurses and midwives in a particular country are related to prestige, their professional autonomy, full recognition of their value and the visibility of their activities. A clear focus in national health policy on the role of GCNMOs in supporting achievement of policy priorities is key.

Individual leadership competencies, training and opportunities

The development of individual competencies, especially leadership competencies, is crucial to developing a policy leadership role. Competencies are defined as having a specific range of skills, knowledge and abilities – in this case, in policy leadership *(19)*.

A Delphi study of the ideal attributes of chief nurses in Europe *(20)* found that GCNMOs can have the following skills: communication; team-working; strategic thinking; professional credibility; leadership; political astuteness; decency/integrity; innovation; decision-making/problem-solving; personal qualities; promotion of nursing; good management; conflict resolution; information handling; and research skills. These policy leadership competencies are directly linked to nurses' and midwives' access to policy leadership courses and programmes for senior nurses, clear career structures and pathways, and mentorship support.

In ensuring equal opportunities for women and men to access policy leadership programmes and mentorship, countries need to acknowledge and take action on the barriers that prevent women from reaching them. They should also recognize that women's disadvantage intersects with, and is multiplied by, other identities, such as race and class *(8)*.

Way forward

GCNMOs and senior nursing and midwifery leaders provide ministries of health with the capacity to ensure focused support and oversight over the largest part of the health and care workforce. They also serve as a critical voice in informing and implementing service change and transformation to provide better care to the population within and beyond the health sector.

This technical brief provides a picture of what is happening in the WHO European Region and can inspire countries to adapt and tailor their model for GCNMOs or senior nursing and midwifery leaders to suit their national needs and context. None of the models presented, however, can perform effectively without key human, financial and strategic resources.

The technical brief shows that a range of models exist in the WHO European Region. Using this technical brief, countries can take several steps to move towards optimizing the roles of GCNMOs and senior nursing and midwifery policy leaders. These include:

- **establishing and strengthening GCNMOs and senior leaders with a clear mandate** to support the shaping of health policy priorities and oversee the capacity of nurses and midwives to support their achievement;
- **reclassifying the current and potential position of GCNMOs and senior leaders under a structured classification of the title of government chief nursing officer or government chief midwifery officer** – this revision would enable the identification of policy factors and capacity requirements for building GCNMOs' and senior nursing and midwifery leaders' competencies and strengthening their positions in countries where building political support is essential;
- **identifying factors that facilitate or hinder GCNMOs' ability to work effectively** – these may include authority for carrying a full range of functions, lack of a clear mandate, access to information and planning activities, and access to financial and human resources;
- **establishing and developing clear career structures, pathways and mentorship opportunities for GCNMOs and senior nursing and midwifery leaders**, with a focus on ensuring equal access and opportunities for women and men;
- **strengthening and preparing GCNMOs to support oversight of measures to mobilize the health and care workforce to effectively support emergency responses and strengthen areas of high priority**, with GNCMOs enabled to ensure rapid improvements in population health, reduction of social and health inequalities and implementation of improved patient safety measures and service delivery; and
- **introducing reforms to rapidly upskill and expand nurses' and midwives' competencies in health policy, workforce planning and management, and leadership.** Young midwives and nurses will also benefit from exposure to a variety of these competencies and health care issues to inform their practice and career planning.

The WHO Regional Office for Europe can support countries by **leveraging the models of senior nursing and midwifery leadership in the Region to build capacity and GCNMOs' competencies through twinning programmes between Member States**. The WHO Nursing and Midwifery Global Community of Practice and European GCNMO Hub may serve as vehicles to support interregional contacts.

The Regional Office can **support Member States with evaluation measures of the GCNMO roles and responsabilities to provide sufficient and sound evidence on their impact in relation to better regulation of work and education of the nursing and midwifery workforces for improved health outcomes**. Monitoring and evaluation of implementation of World Health Assembly resolution WHA 74.15 on policy leadership can include consideration of the models and the changeable nature of GCNMOs' positions.

The Regional Office and other funding organizations can also prioritize high-impact policy leadership programmes in the Region to equip senior nursing and midwifery leaders with a wider set of health policy strategies and approaches to shape policy and politics, recognizing the importance of cross-cuting actions with the establishment of partnerships between GCNMOs and their colleagues in Ministry of Health, colleagues in other sectors including the social and financial sectors and non governmental organisations to promote improved health outcomes.

References[2]

1. Roles and responsibilities of government chief nursing and midwifery officers: a capacity-building manual. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/handle/10665/351684).

2. National Health Workforce Accounts data portal [online database]. Geneva: World Health Organization; 2022 (https://apps.who.int/nhwaportal/).

3. Nove A, Friberg IK, de Bernis L, McConville F, Moran AC, Najjemba M et al. Potential impact of midwives in preventing and reducing maternal and neonatal mortality and stillbirths: a Lives Saved Tool modelling study. Lancet Glob Health. 2021;9(1):e24–32. doi: https://doi.org/10.1016/S2214-109X(20)30397-1.

4. Aiken LH, Sloane DM, Bruyneel L, Van den Heede K, Griffiths P, Busse R et al. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. Lancet. 2014;383(9931):1824–30. doi:https://doi.org/10.1016/S0140-6736(13)62631-8.

5. Ball JE, Bruyneel L, Aiken LH, Sermeus W, Sloane DM, Rafferty AM et al. Post- operative mortality, missed care and nurse staffing in nine countries: a cross-sectional study. Int J Nurs Stud. 2018;78:10–5. doi:10.1016/j.ijnurstu.2017.08.004.

6. Laurant M, van der Biezen M, Wijers N, Watananirun K, Kontopantelis E, van Vught AJ. Nurses as substitutes for doctors in primary care. Cochrane Database Syst Rev. 2018;7 (7):CD001271. doi:10.1002/14651858.CD001271.pub3.

7. Crisp N, Brownie S, Refsum C. Nursing and midwifery: the key to the rapid and cost-effective expansion of high-quality universal health coverage. Technical report. Doha: World Innovation Summit for Health; 2018 (https://doi.org/10.13140/RG.2.2.16167.39841).

8. Delivered by women, led by men: a gender and equity analysis of the global health and social workforce. Geneva: World Health Organization; 2019 (Human Resources for Health Observer Series No. 24; https://apps.who.int/iris/handle/10665/311322).

9. Downs JA, Mathad JS, Reif LK, McNairy ML, Celum C, Boutin-Foster C et al. The ripple effect: why promoting female leadership in global health matters. Public Health Action. 2016;21;6(4):210–1. doi:10.5588/pha.16.0072.

10. European Programme of Work 2020–2025: United Action for Better Health in Europe. Copenhagen: WHO Regional Office for Europe; 2021 (https://apps.who.int/iris/handle/10665/339209).

11. Building better together. Roadmap to guide implementation of the Global Strategic Directions for Nursing and Midwifery in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2021 (https://apps.who.int/iris/handle/10665/350207).

12. European Observatory on Health Systems and Policies, McKee M. Drawing light from the pandemic: a new strategy for health and sustainable development. Copenhagen: WHO Regional Office for Europe; 2021 (https://apps.who.int/iris/handle/10665/345027).

13. The state of the world's midwifery 2021. New York (NY): United Nations Population Fund; 2021 (https://www.unfpa.org/publications/sowmy-2021).

14. State of the world's nursing 2020: investing in education, jobs and leadership. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/331677).

2 All references accessed 15 August 2022.

15. Health workforce policy and management in the context of the COVID-19 pandemic response: interim guidance, 3 December 2020. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/337333).

16. Greenberger C, Haron Y, Riba S. The Nursing Division of the Israeli Health Ministry moves nursing into the forefront of health care. Policy Polit Nurs Pract. 2014;15(1–2):49–57.doi:10.1177/1527154414538101.

17. Salvage J, Heijnen S. Nursing in Europe. A resource for better health. Copenhagen: WHO Regional Office for Europe; 1997; (WHO Regional Publications, European Series; 74; (https://apps.who.int/iris/handle/10665/107350).

18. Rasmussen B, Holton S, Wynter K, Phillips DJ, David JL, Rothmann MJ et al. We're on mute! Exclusion of nurses' voices in national decisions and responses to COVID-19: an international perspective. J Adv Nurs. 2022;78(7):e87–90. doi:10.1111/jan.15236.

19. Langins M, Borgermans L. Strengthening a competent health workforce for the provision of coordinated/integrated health services. Working document. Copenhagen: WHO Regional Office for Europe; 2015 (https://apps.who.int/iris/handle/10665/362099).

20. Hennessy D, Hicks C. The ideal attributes of chief nurses in Europe: a Delphi study for WHO/Europe. Copenhagen: WHO Regional Office for Europe; 2001 (https://apps.who.int/iris/handle/10665/107368).

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Türkiye
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

World Health Organization
Regional Office for Europe

UN City, Marmorvej 51,
DK-2100 Copenhagen Ø, Denmark
Tel.: +45 45 33 70 00
Fax: +45 45 33 70 01
Email: eurocontact@who.int
Website: www.who.int/europe

WHO/EURO:2022-5975-45740-65795